



ATTACHMENT B
Amendment to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

1-6. (Canceled).

7. (Currently amended) A hydrocarbon desulfurization method, said method comprising: ~~which is characterized in that a hydrocarbon raw material is desulfurized~~
desulfurizing a hydrocarbon raw material comprising methane, ethane, propane and butane, in the presence of hydrogen ~~with~~ using a desulfurizing agent manufactured by a method comprising:

mixing a mixture containing a copper compound and a zinc compound
with an aqueous solution of an alkali substance to prepare a precipitate,

calcining the resultant precipitate, forming the calcined precipitate into a
shaped form of a copper oxide - zinc oxide mixture, impregnating the shaped
form with iron and/or nickel,

calcining the impregnated form to produce a calcined oxide, and

reducing the calcined oxide with hydrogen,

wherein the desulfurization is performed at a space velocity (GHSV) of 200 to 10,000
h⁻¹.

8. (Currently Amended) The hydrocarbon desulfurization method according to
claim 7, wherein ~~an amount of~~ the hydrogen ~~which is present in an amount~~ such that the
hydrogen/hydrocarbon raw material molar ratio is 0.0005 to 0.4 ~~is present~~.

9. (Previously Presented) The hydrocarbon desulfurization method according to claim 7, wherein desulfurization is performed at a pressure of 0.05 to 50 atm, and a temperature of 100 to 400°C.

10. (Original) The hydrocarbon desulfurization method according to claim 7, wherein the raw material hydrocarbon is town gas, and an amount of hydrogen is present so that the hydrogen/town gas molar ratio is 0.0005 to 0.4.

11. (Currently Amended) The ~~town gas~~ desulfurization method according to claim 10, wherein desulfurization is performed at a pressure of 0.05 to 50 atm, and a temperature of 100 to 400°C.

12. (Currently Amended) The ~~town gas~~ desulfurization method according to claim 11, wherein desulfurization is performed so that the sulfur content in the town gas is not more than 5 ppb (vol ppb).